



The Franchise Valuations Reporter

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Publisher's Note

Welcome to a special edition of *The Franchise Valuations Reporter* devoted to just one topic: EBIDTA.

As a reminder, we report on damages, valuations, expert testimony, nexus, tax and cyber security issues as they relate to franchising. As always, we are happy to provide readers with a free initial consultation on any of these topics.

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Franchise Valuations: Why EBITDA is BS *Method is Rarely Fair or Accurate*

Imagine that you are Mr. Peter Silvermensch, the arbitrator in a wrongful termination dispute between a Wisconsin No Teeth Needed® barbecue franchisee and the franchisor. Because in Wisconsin it is difficult to establish "good cause" for termination, you have determined that the franchisor is liable to pay the franchisee "fair market value" for its wrongfully terminated franchise.[1] Now the issue is price.

The franchisor's counsel asserts that fair market value is EBITDA times 4.5 because that's the going price - take it or leave it. The franchisee disagrees and says the multiple of EBITDA method is arbitrary and offers no means for testing its underlying assumptions. The franchisee says that its last year of operations was an off year because of the franchisor's wrongful acts and that in any event the EBITDA multiple is too low.

To help Mr. Silvermensch make his decision, we offer the following on why EBITDA is BS.

EBITDA is an acronym for "Earnings Before Interest, Taxes, Depreciation and Amortization". The formula was first used by lenders in the 1980s to test a borrower's ability to repay debt out of operations. The impetus for this article (which is the entire issue of this month's newsletter) was John Gordon's thought-provoking posting on the bluemaumau.org website entitled, "[Limitations of EBITDA as a Meaningful Financial Metric](#)" in which he wrote:

EBITDA alone as the metric misses at least eight costs and expenses, that are vital to know, calculate and consider in **operating** and **valuing** the business as a cash and value

producer. Using a business segment such as a store, restaurant or hotel as an example, here are the eight required reductions to EBITDA that must be subtracted, listed in order of magnitude of the cash outlay, to really get to **operating** economic profit. (Emphasis added.)

1. **Interest expense:** [Gordon asks if it is a real cash outlay, how it can be ignored.]
2. **Principal repayment:** [Gordon considers this another cash outlay which cannot be ignored.]
3. **Future year's major renovation/remodeling:** [Gordon states that such refurbishment often costs 10-30% of the total initial investment. Of course, sensible budgeting would require reserves which would probably approximate the amount of depreciation.]
4. **Taxes, both state and federal:** [Gordon states, "the reality is the marginal tax rate is about 40%".]
5. **New technology and business mandates:** [Gordon states "New technology and new business innovation CAPEX must be funded to remain competitive." But again, sensible financial planning would require reserves which would probably approximate the amount of depreciation]
6. **Overhead:** [Gordon notes that G&A is often omitted as a cost at the unit level.]
7. **Maintenance CAPEX:** [Again, sensible financial planning would require reserves to account for such costs although they are often accounted for by currently expensing the costs. Gordon states, "In the restaurant space, a good number might be 2% of sales."]
8. Finally Gordon notes that **new expansion costs** are generally ignored in the EBITDA computation.

As Mr. Gordon correctly points out, the eight factors addressed do impact "operating economic profit" but his discussion does not really address the failings of EBITDA for valuation purposes. For example, EBITDA ignores the time factor (or term of the agreement) which, from a valuation perspective, is the deciding factor in whether the franchise is to be considered a wasting asset or a long-term investment, i.e. is it analogous to an oil well or to a treasury bond? And, Mr. Gordon's posting, addressing only the operating results, does not expose EBITDA in the valuation context for the arbitrary, rarely-correct shortcut that it is. In this article first we will discuss valuation in general, then the difference between profits and EBITDA and finally we will offer differing calculations based on real-world financial assumptions.

Valuation Methods Generally

The specialized vocabulary of appraisals and valuations is stultifying and filled with technical terms many of which mean the same thing: there are discounted cash flows and modified discounted cash flows; there are price-to-earnings ratios and price-to-sales ratios; and there are "cap" rates, capital asset pricing models (with or without growth rates) and many more.

The major terms used in business valuations are "fair market value," which is a legal term, and "fair value," which is an accounting term. They both generally mean the same thing. There are three (and really only three) general methods that are acceptable for determining business value. These are - in legal terms - book value, capitalization of earnings, and comparable sales.

Book value is the net worth of a company determined by either its balance sheet assets or the replacement cost of its balance sheet assets - minus liabilities. The capitalization of earnings method assumes that the earnings of a business constitute an annual percentage return on the value of the business. "Comparable" sales are recent sales of similarly situated businesses. In accounting terms these methods are known as (1) cost (book value), (2) income (capitalization of earnings), and (3) market (comparable sales), respectively.

Using EBITDA to arrive at fair market value (FMV) is a variant of the "income" method. However, it is rarely reliable because it is a shortcut that generally ignores important valuation factors such as growth in revenues, growth in expenses, a very good year or a very bad year if that is the year of the calculation, the cost of capital and many other variables. To use this methodology is to replace analysis with a generally arbitrary and sometimes mindless EBITDA "multiple" the calculation for which is not explained and thus cannot be tested.

Multiple of EBITDA Method of Valuation

The EBITDA method of calculating value starts with profits from the income statement to which the costs of interest, taxes, depreciation and amortization are added back. The theory for adjusting for interest is that one is valuing the enterprise on a debt-free basis. The theory for adding back taxes is bizarre and I cannot justify it[2] and the theory for adjusting for depreciation and amortization is that they are non-cash deductions and so should be added back to determine what is supposed to be a cash-flow indicator.

Once EBITDA is calculated it is multiplied by an EBITDA multiplier - an *ipse dixit* number if ever there was one - to arrive at fair market value. While the normal range appears to be between 4 and 7 currently, in my practice I have seen EBITDA multiples claimed by valuers as low as 2 and as high as 36. This number is arbitrary at best and during negotiations cannot be tested by changing assumptions other than the EBITDA multiplier itself - with such changes based on guesses rather than math or specific reasoning.

Income Method - Discounted Cash Flow of Future Earnings

The "income" or "capitalization of earnings" method of valuation assumes either that the earnings of a business constitute an annual percentage return on the value of the business or, more accurately, that the present discounted value of all of the business' earnings into the future is the current business value.

Using this method, a valuation is calculated by estimating annual cash flows over an appropriate term and adding a terminal value for future cash flows (after such initial term); and to each applying a discount rate to calculate the net present value (NPV). Put simply, the "income" method attempts to estimate the future anticipated stream of

earnings and cash flow generated by the business, and discount it to NPV. Referred to as the Discounted Cash Flow (DCF) method, it is the preferred "income" method of valuation. It generally follows three steps:

1. an estimation of net cash flows that the firm will generate over a projected period (these may vary: some stores may close for some or part of the year for renovation or for storm damage, some stores may have construction at the site, there may be a bad year, the cost of one necessary ingredient that they must buy may skyrocket on a supply disruption, etc.);
2. computation of a terminal or residual value equal to the future value of the firm's cash flows beyond the projection period (this is dependent on the variables of contract term and contract renewal among others); and
3. the application of a discount rate (estimated cost of capital) to reduce to present value the projected net cash flows and the estimated terminal or residual value. (This gives rise to the issue of what is the appropriate rate.)

Example - No Teeth Needed

To show that the connection between EBITDA and fair market value is generally tenuous, we have built a comparison spreadsheet based on the following assumptions about No Teeth Needed, a barbecue franchise where the average unit volume (AUV) is \$1 million per year; AUV growth is 3%; and there are currently 100 units which are projected to grow at the rate of 5 per year. At the unit level the cost of goods sold (COGS) is 35% of gross, labor is 25% of gross, rent is 10%, the royalty is 6% and the ad fund contribution is 2%. It is further assumed that the No Teeth Needed franchisee has debt of \$400,000 on which they pay 5% interest and has depreciation deductions per annum equal to 3.5% of gross. Finally, we assume the unit is in Wisconsin where it is quite difficult to terminate a franchise and therefore, that the agreement will be renewed; hence we will assume a terminal value at the end of Year #7 equal to the net present value of the first seven years' profits postponed until Year #7.

A valuation spreadsheet using the DCF method to solve for an appropriate EBITDA multiplier in this case shows a fair market value of \$1,322,688 (assuming a discount rate of 10%) which is the equivalent of an EBITDA multiplier of 6.01 (Total NPV DCF divided by EBITDA):

Franchisee Operations	Yr#1	Yr#2	Yr#3	Yr#4	Yr#5	Yr#6	Yr#7
Revenues							
Store Sales (AUV)	\$1,000,000	\$1,030,000	\$1,060,000	\$1,090,000	\$1,120,000	\$1,150,000	\$1,180,000
Total Revenues	\$1,000,000	\$1,030,000	\$1,060,000	\$1,090,000	\$1,120,000	\$1,150,000	\$1,180,000
Expenses							
COGS	\$350,000	\$360,500	\$371,000	\$381,500	\$392,000	\$402,500	\$413,000

Labor	\$250,000	\$257,500	\$265,000	\$272,500	\$280,000	\$287,500	\$295,000
Rent	\$100,000	\$103,000	\$106,000	\$109,000	\$112,000	\$115,000	\$118,000
Royalties	\$60,000	\$61,800	\$63,600	\$65,400	\$67,200	\$69,000	\$70,800
Ad Contributions	\$20,000	\$20,600	\$21,200	\$21,800	\$22,400	\$23,000	\$23,600
Sub-Total Expenses	\$780,000	\$803,400	\$826,800	\$850,200	\$873,600	\$897,000	\$920,400
EBITDA	\$220,000	\$226,600	\$233,200	\$239,800	\$246,400	\$253,000	\$259,600
Interest	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Depreciation	\$35,000	\$36,050	\$37,100	\$38,150	\$39,200	\$40,250	\$41,300
Total Expenses	\$835,000	\$859,450	\$883,900	\$908,350	\$932,800	\$957,250	\$981,700
Net Profits	\$165,000	\$170,550	\$176,100	\$181,650	\$187,200	\$192,750	\$198,300
Terminal Value							\$874,124
NPV Profits	\$874,124						
NPV Terminal Value	\$448,564						
Total NPV DCF	\$1,322,688						
Total EBITDA multiplier	6.01						

However, if unit growth were assumed to be 5% (rather than 3%) and the discount rate were assumed to be 15% (rather than 10%), the DCF method would yield a FMV of \$1,074,261, which would equate to an EBITDA multiplier of 4.88.

Continuing the exercise to show how EBITDA works in the valuation of a franchisor (as opposed to a franchisee), we will further assume that No Teeth Needed charges a franchise fee of \$30,000 and as stated above, has 100 units and is growing at 5 additional units per year with general and administrative (G&A) expenses equal to 60% of revenues. Using the DCF method and assuming a discount rate of 8% (franchisors generally command a lower discount rate than franchisees) to solve for an equivalent EBITDA multiplier (assuming net profits equals EBITDA at the franchisor level) we end up with the following:

Franchisor	Yr#1	Yr#2	Yr#3	Yr#4	Yr#5	Yr#6	Yr#7
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Operations							
Revenues							
Franchise Fees	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
Royalties	\$6,300,000	\$6,798,000	\$7,314,000	\$7,521,000	\$8,064,000	\$8,625,000	\$9,204,000
Total Revenues	\$6,450,000	\$6,948,000	\$7,464,000	\$7,671,000	\$8,214,000	\$8,775,000	\$9,354,000
Expenses							
G&A	\$5,160,000	\$5,558,400	\$5,971,200	\$6,136,800	\$6,571,200	\$7,020,000	\$7,483,200
Net Profits	\$1,290,000	\$1,389,600	\$1,492,800	\$1,534,200	\$1,642,800	\$1,755,000	\$1,870,800
Terminal Value							\$8,014,122
NPV Profits	\$8,014,122						
NPV Terminal Value	\$4,676,163						
Total NPV DCF	\$12,690,285						
Total EBITDA multiplier	9.84						

Clearly, EBITDA is unreliable because it is so imprecise. Changes in the assumptions which can be analyzed and explained as part of a DCF exercise play havoc and appear as arbitrary and capricious when simply offered as a take-it-or-leave-it EBITDA multiplier. For example in valuing the franchisor in our example if the estimated unit growth is raised from 5 to 7 units per year the DCF fair market value computation yields FMV = \$13.489 million and an EBITDA multiplier of 10.17. In the franchisee context a simple change in the assumed rate of interest on the outstanding loan from 5% to 9% lowers the EBITDA multiplier from 6.01 to 5.48 - that's almost a 9% difference based on a fluctuation that realistically should have no effect on value!

Conclusion

So in closing I would tell the arbitrator, Mr. Silvermensch, that by changing the assumptions in the example above we have calculated EBITDA multiples from 4.88 to 10.17. That plainly shows that EBITDA is an unreliable shortcut generally used by the

lazy or over-reaching party to a valuation dispute. It ignores growth, assumes revenues and expenses to be static, does not address the termination issue and is difficult if not impossible to adjust in the light of changed assumptions to any one of a variety of factors. DCF is a far more accurate and reliable methodology.

[1] See *Baur Truck v. Sepulveda* (Wis. Ct. App. 1993) CCH Business Franchise Guide ¶ 10,193.

[2] See my article on [valuation issues that apply to pass-through entities](#) in the March 2013 issue of this newsletter.